MARTIN LOGAN

MARTIN LOGAN
POWER
LAN
1 2 3 4 5 6 7 8
MDA16

Fully Matrixed
Distributed Audio
With Easy-to-Use
Room Correction

MDA16
MDA8

martinlogan.com

MARTIN LOGAN®

MDA16
MartinLogan MDA16

1	2	**3**	**4**	**5**	**6**	**7**	**8**		Digital Out
Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8	

Mono Bridge / Stereo Bridge (per zone group)

Zones
Inputs
General
Store / Load

Zone 1

Zone Settings		Volume	
Zone Power ⓘ	◯	Zone Volume ⓘ — ━━━━●━ +	59
ARC ⓘ	◯	Power-On Volume ⓘ — ━━━●━━ +	53
Zone Name ⓘ	Zone 1 [Apply]	Max Volume ⓘ — ━━━━━● +	90
Input Source ⓘ	Analog 1 ▾	Mute ⓘ ◯	
Listening Mode ⓘ	Stereo / Mono		
Speaker Profile ⓘ	MartinLogan ▾ IC8 ▾ ◯		

An intuitive, adaptive web-based user interface makes easy work of setup.

ZONE CONFIGURATION OPTIONS
- Create a custom name for each zone
- Assign any input to any zone—each zone can have its own unique input or a single input can be assigned to multiple zones
- Bridge zones to deliver more power—especially useful when adding a custom-installed subwoofer
- Enable subwoofer bass management in any zone and set the crossover frequency, level, phase, and polarity
- Turn Anthem Room Correction (ARC) on or off in each zone to easily hear the difference that ARC makes
- Independently configure each zone for stereo or mono playback
- Independently adjust levels in each zone for treble, bass, left-channel, and right-channel to make sure each room sounds its best
- Independently adjust each zone's volume, the default power on volume, and maximum volume level

INPUT CONFIGURATION OPTIONS
- Create a custom name for every input
- Independently adjust trim for every input

ADDITIONAL FEATURES
- Map any of the digital inputs to the digital output to effortlessly expand an installation with additional MDAs
- Adaptive user interface design automatically rearranges itself, making it easy to use on a phone, tablet, or computer
- Save settings before making changes and reload them later
- Firmware updates are available at the press of a button via a web-interface

Key features and benefits:

- **8- or 16-channels of Class D amplification**

- Provides **60 Watts (8 Ohms) / 120 Watts (4 Ohms)** with all channels driven.

- **Bridging allows up to 200 Watts** (8 Ohms) for high power applications such as subwoofers.

- Independent **Anthem Room Correction (ARC®), bass management, bass/treble adjustments, and level control** settings are available for each zone, assuring each room sounds its best.

- Digital-to-analog converter (DAC) **accepts PCM up to 24-bit/192kHz**, maintaining the integrity of high-resolution source materials.

- **Speaker-specific DSP settings** are pre-loaded for MartinLogan custom install and outdoor speakers to provide exceptional sound quality and protect speakers from being overdriven.

- For an authentic 2.1 experience, each zone offers independent **bass management and subwoofer integration** via a passive (RCA) or active (powered by another zone in bridge mode) connection.

- Intuitive setup via a streamlined **web interface** allows quick setup

- **Full digital/analog matrix switching** allows any analog RCA, digital coaxial, or digital optical input to be assigned to any output—either pre-configured via the web interface or switched in real-time via IP/RS-232.

- Robust **IP/RS-232 capability** ensures compatibility with leading home automation systems.

- **Analog pass-through** connections enable daisy-chaining of multiple MDAs.

- **Digital switching output** allows linking of digital inputs between multiple MDAs.

- **Advanced Load Monitoring** continually monitors the output of each channel for maximum control and reliability.

- **Speaker terminal block connections accept up to 12 AWG**, ideal for long speaker cable runs.

- **Fast power on via IP/RS232**, 12 Volt trigger, or audio sensing.

- A high-efficiency design meets global power saving standards.

The most flexible distribution solutions ever brought to market...and, if we may be so humble, the best sounding.

MartinLogan has long been known for providing *Truth in Sound*. This heritage is at the very heart and soul of who we are.

With the ever-growing popularity of whole-house and outdoor audio systems, the challenge of unlocking the performance potential of sound has only increased. Historically, when selecting distribution solutions, installers have only had access to a mix of one or two key features—web-based setup, digital inputs, equalization, and/or matrixing capabilities. **Enter MartinLogan's MDA.** These astounding devices deliver all of these features in one chassis and with the added benefit of Anthem Room Correction (ARC) and bass management for adding dedicated subwoofers.

MDAs are the most flexible and adaptive distribution solutions available today, delivering dramatic levels of performance where it matters—in the room. With full matrix switching capabilities of analog and digital inputs, and independent room correction with ARC in each zone, MDAs allow you to install robust audio solutions throughout a home or business. These unique technologies actually understand the unique acoustic signature of each listening space and correct deviations from an ideal response.

With an eye on preserving even the most subtle nuances of music, MDAs accept high-resolution PCM up to 24-bit/192kHz. MDAs will never hold back a compelling musical experience.

The MDA8 powers up to four zones with eight total channels at 60 Watts per channel into 8 Ohms (or 120 into 4 Ohms). The MDA16 powers up to eight zones with sixteen full channels at 60 Watts per channel into 8 Ohms (or 120 into 4 Ohms). Zones can also be bridged for a high output mode with 200 Watts per channel into 8 Ohms.

MDAs are the first solution to offer the ability to expand a system by adding external subwoofers. This is accomplished through either an RCA connection to a powered subwoofer or external sub amplifier; or by assigning a zone's output to

power a subwoofer. You can even bridge multiple zones to provide more power when it's needed. Any subwoofer attached to an MDA also benefits from Anthem Room Correction, which not only corrects acoustic output for an ideal response but also sets bass management settings (including subwoofer phase) for a flawless transition to the main speakers.

MDAs are fully configurable using an intuitive web-based interface that controls every available setting for every zone and every input. It has never been easier to set up a whole-house audio system with such extremely accurate results.

High use environments are highly susceptible to acoustically harmful room interactions due to the prevalence of hard materials and complex surfaces. This reduces clarity in the midrange and muddies the bass. Configuring custom DSP settings is a relatively common feature in high-end distribution solutions, but is limited to simple parametric equalization which has severe limitations. MDAs utilize both speaker-based DSP and Anthem Room Correction to deliver perfect sound in every environment, rendering music with clear dialogue and deep, accurate bass. Anthem Room Correction is accomplished through a simple measurement process that can take as little as five minutes per zone. Speaker-specific DSP settings are preloaded for performance optimization of MartinLogan custom install and outdoor speakers. This level of customization effortlessly provides exceptional sound quality while helping protect speakers from being overdriven. Further, to safeguard speakers, DSP selection has the added benefit of including sophisticated impedance/voltage curves that, when combined with Advanced Load Monitoring, maintain absolute control of MartinLogan speakers and intervene if a speaker may experience damage.

MDAs are designed to sound great with more than just MartinLogan speakers. In addition to providing the benefits of Anthem Room Correction and Active Load Monitoring for any connected speaker or subwoofer, MDAs allow you to fine-tune any speaker's response by adjusting the volume level, left/right balance, and bass and treble levels.

Additionally, with both IP and RS-232 connections, MDAs are compatible with leading home automation systems, including Control4, Crestron, Elan, RTI, Savant, and URC.

ARC® GENESIS

Easy-to-use and powerful, Anthem Room Correction delivers professional results.

How is Anthem Room Correction (ARC) implemented in MDA?
MartinLogan MDAs are fully matrixed with the MDA8 allowing the creation of up to four zones and the MDA16 allowing up to eight. Within each unique zone, you can take acoustic measurements and upload zone-specific ARC correction.

Why is Anthem Room Correction (ARC) important for custom installation applications?
Simply put, Anthem Room Correction "corrects" the effects that a room has on the sound radiating from loudspeakers and subwoofers. When setting up custom installed audio solutions an installer is faced with many constraints, such as boundaries of architectural elements, hard surfaces, and aesthetic limitations within the room. These factors can have a significant, negative impact on the sound quality.

With the use of Anthem Room Correction, the undesirable effects of these obstacles can quickly be removed, allowing your speakers to achieve a more natural sound in any room, as close to the lab standard as possible—and with ARC available in every zone, the challenge of making every room sound its best has never been more straightforward.

On a more sophisticated level, ARC is a proprietary digital signal processing software that works with a specially-engineered calibration microphone and your computer to quickly and easily optimize audio in unique listening spaces. Anthem engineers developed the ARC system while researching how to replicate the audio-lab standard of performance in non-lab environments. This groundbreaking research was conducted in conjunction with the National Research Council of Canada, the Canadian government's research and technology organization.

ARC Microphone (included)

+

Mac OS X Windows

+

ARC Genesis Software (free download)

How do I run ARC on these?
ARC Genesis is compatible with MAC and Windows operating systems. Each MDA comes with a dual input ARC microphone. Just download the free ARC Genesis software to a laptop from AnthemARC.com and follow the step-by-step directions. The ARC microphone, placed in the listening space, takes precise measurements. The software compares the acoustic response of the room to the ideal in-room response, unique to each room. Sophisticated DSP accurately equalizes the response and automatically sets low-frequency crossover curves to account for the room's unique acoustic signature. Achieve the most accurate, naturally blended audio with the touch of a button!

MARTIN LOGAN®

COMPLIES WITH
...FUL STANDARDS
...NFORME AUX
...APPLICABLES.

ANALOG 7
L
R

ANALOG 7
OUT

TÜV
SÜD
Safety tested
Production monitored
S
C   US

CE FC

ANALOG 8
L
R

RS-232
STRAIGHT CAB...

SUB OUT

SUB OUT

NETWORK

TRIG IN

5-24V
DC/AC

ZONE 7
+ L — R +

ZONE 8
+ L — R +

CHASSIS
GROUND

...oHS
...11/65/EC

BRIDGE MODE

	MDA8	**MDA16**
Channels / Zones	8 channels / Up to 4 zones	16 channels / Up to 8 zones
Power Output RMS per Channel (8 Ohm)	60 Watts	60 Watts
Power Output RMS per Channel (4 Ohm)	120 Watts	120 Watts
High Output Mode (Bridged) RMS per Channel (8 Ohm)	200 Watts	200 Watts
Frequency Response	10Hz — 20kHz ±0.5dB	10Hz — 20kHz ±0.5dB
THD + N (1 kHz at 50W into 8 Ohms/100W into 4 Ohms)	<0.4% / <0.4%	<0.4% / <0.4%
Digital-to-Analog Converter	PCM up to 24-bit/192kHz	PCM up to 24-bit/192kHz
Inputs (analog)	4x RCA pairs (left & right)	8x RCA pairs (left & right)
Inputs (digital S/PDIF)	1x optical (Toslink)	2x RCA coaxial; 2x optical (Toslink)
Inputs (network)	RJ-45 10Base-T/100Base-TX ethernet port (female)	RJ-45 10Base-T/100Base-TX ethernet port (female)
Inputs (other)	Micro-USB (for ARC); RS-232	Micro-USB (for ARC); RS-232
Input (trigger)	1x 3.5mm (5— 24V DC/AC)	1x 3.5mm (5— 24V DC/AC)
Outputs (speaker level)	4x removable Euroblock style (left & right) accommodates wire up to 12AWG	8x removable Euroblock style (left & right) accommodates wire up to 12AWG
Output (analog)	—	2x RCA pair (left & right)
Outputs (subwoofer)	4x RCA (with bass management and room correction)	8x RCA (with bass management and room correction)
Outputs (digital matrix)	—	1x optical (Toslink)
Output (trigger)	1x 3.5mm (5— 24V DC/AC)	1x 3.5mm (5— 24V DC/AC)
Audio In-Out Matrix	Yes	Yes
Advanced Load Monitoring	Yes	Yes
Controls (via web-based UI)	Bass level: ±10dB for each zone; Treble level: ±10dB for each zone; Level balancing: ±12dB for each zone	Bass level: ±10dB for each zone; Treble level: ±10dB for each zone; Level balancing: ±12dB for each zone
Controls (back panel)	Power Mode: Auto, Trigger, External Command; Network Reset (pinhole); Factory Reset (pinhole); Mains Power: On /Off	Power Mode: Auto, Trigger, External Command; Network Reset (pinhole); Factory Reset (pinhole); Mains Power: On /Off
Room Correction	Anthem Room Correction (ARC) for each zone	Anthem Room Correction (ARC) for each zone
Microphone (for room correction)	Included dual input microphone (3.5mm and mini-USB)	Included dual input microphone (3.5mm and mini-USB)
Setup	Web-based user interface	Web-based user interface
IP Control (via IP or RS-232)	Drivers for Control4, Crestron, Elan, RTI, Savant, and URC	Drivers for Control4, Crestron, Elan, RTI, Savant, and URC
AC Voltage	120V ±10% ~50/60Hz, 220-240V ±10% ~50/60Hz	120V ±10% ~50/60Hz, 220-240V ±10% ~50/60Hz
Operational Temperature	32° F to 113° F (0° C to 45° C)	32° F to 113° F (0° C to 45° C)
Storage Temperature Range	-22° F to 158° F (-30° C to 70° C)	-22° F to 158° F (-30° C to 70° C)
Humidity Range	5% to 95% non-condensing	5% to 95% non-condensing
Rack Mount Ears & Feet	Included	Included
Rack Space (feet removed)	2U	2U
Dimensions (H x W x D, without feet, rack mount ears mounted, speaker terminal blocks installed)	3.5" x 19" x 17" (8.9 x 48.3 x 43.2 cm)	3.5" x 19" x 17" (8.9 x 48.3 x 43.2 cm)
Dimensions (H x W x D, with feet, no rack mount ears, speaker terminal blocks installed)	3.9" x 17" x 17" (9.9 x 43.2 x 43.2 cm)	3.9" x 17" x 17" (9.9 x 43.2 x 43.2 cm)
Weight	21 lbs. (9.5kg)	24 lbs. (10.8kg)